

CITGO Petroleum Corporation



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December 21, 2020

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Massachusetts Department of Environmental Protection
Surface Water Discharge Permitting (NPDES)
1 Winter Street
Boston, Massachusetts 02108

RE: Comments on EPA NPDES Draft Permit MA0004782 and Massachusetts Permit to Discharge Pollutants to Surface Water (MA Permit No. MA0004782)
CITGO Petroleum Corporation, Braintree Terminal
385 Quincy Avenue, Braintree, MA

Dear Mr. Chien and Ms. Ruan:

CITGO Petroleum Corporation (CITGO) respectfully submits the enclosed comments on (1) the draft National Pollutant Discharge Elimination System (NPDES) permit (Draft Permit) issued by the United States Environmental Protection Agency (EPA) on October 26, 2020 and (2) the Massachusetts Permit to Discharge Pollutants to Surface Water issued by the Massachusetts Department of Environmental Protection (MassDEP) on October 26, 2020 (the MassDEP Permit) for discharges from the CITGO Braintree Terminal (the Facility). As described herein, due to the inclusion of significant changes to the effluent limitations and conditions provided in the Draft Permit, which may drastically impact the future compliance strategies, capital investment, and overall affordability of operations at the Facility with no attendant benefits to the protection of water quality in the receiving water body, CITGO developed the detailed comments below in conjunction with its consultants, Kleinfelder and Environmental Strategies & Management, Inc. (ES&M), and its attorneys, Nutter, McClennen and Fish LLP, to provide its full perspective on the Draft Permit prior to finalization by EPA.

CITGO welcomes and appreciates any opportunity to work with EPA and the MassDEP to resolve the questions and issues identified in these comments prior to the issuance of the final permit. As provided in the following comments, CITGO requests that EPA incorporate the revisions provided by CITGO.

Background

CITGO owns and operates the Facility and its drainage system, which includes two outfalls, Outfall 001 and Outfall 002. Outfall 001 is authorized to discharge stormwater runoff, hydrostatic test water, and remediated groundwater to the Weymouth Fore River. Prior to discharging through Outfall 001 into the Weymouth Fore River, the stormwater sources above pass through a main oil water separator (OWS), referred to herein as OWS 1. Remediated groundwater (Outfall 002) and stormwater from the truck rack loading area are pretreated through their own remediation systems, before combining with stormwater from parking areas, building roofs, tank farm secondary containment areas, and paved roads, and hydrostatic test water from intermittent testing events. These sources combine and are routed through OWS 1. OWS 1 consists of a Vortex Stormceptor Unit with a design flow rate of 6,000 gallons per minute (GPM) and a maximum rating of 7.294 million gallons per day (MGD) and two American Petroleum Institute (API) OWSs in parallel, each with a design flow rate of 3,000 GPM (6,000 GPM total). Outfall 002 is an internal outfall that discharges groundwater from an onsite groundwater remediation system to the stormwater drainage system upstream of Outfall 001.

Stormwater that falls within the tank dikes is generally held within the dikes and released manually by Facility operators following inspection. Stormwater that falls outside of the diked areas is considered “uncontrolled” and flows through OWS 1 and to Outfall 001 without detention. This results in measured flow rates as high as 3,600gpm. Due to the topographic relief of the property and the volume of stormwater generated within the uncontrolled stormwater area, detention of this stormwater is not possible.

In addition, the Facility contains a third outfall, referred to in the Draft Permit as the “Unpermitted Stormwater Outfall”, that discharges stormwater runoff to the Weymouth Fore River from an approximately seven acre portion of the Facility that is an isolated, non-contact area outside of the tank storage and operations areas at the Facility.

The NPDES permit currently in effect was issued on June 12, 2008 with an effective date of September 1, 2008 and expired on August 31, 2013 (the 2008 Permit). A timely renewal application was submitted by CITGO, administratively continuing the 2008 Permit until such time as EPA issues a new final permit. When finalized, the Draft Permit will supersede the 2008 NPDES permit.

Comments

CITGO offers the following comments and proposed resolutions on the Draft Permit, which covers the discharges from Outfall 001 and Outfall 002:

1. Total Suspended Solids (TSS) Sampling Frequency

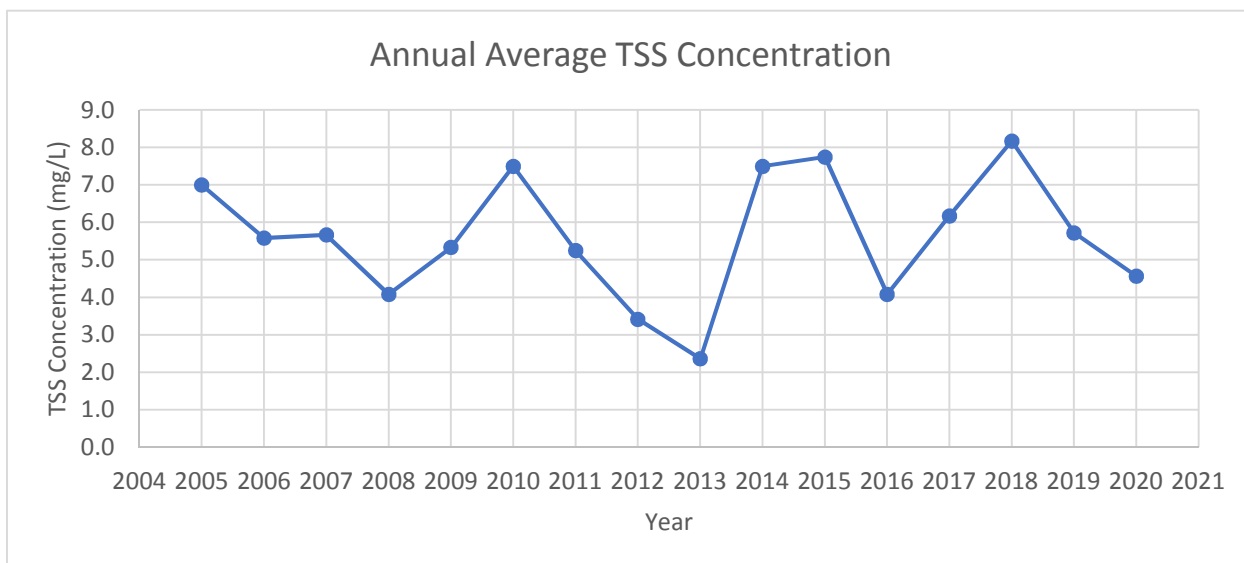
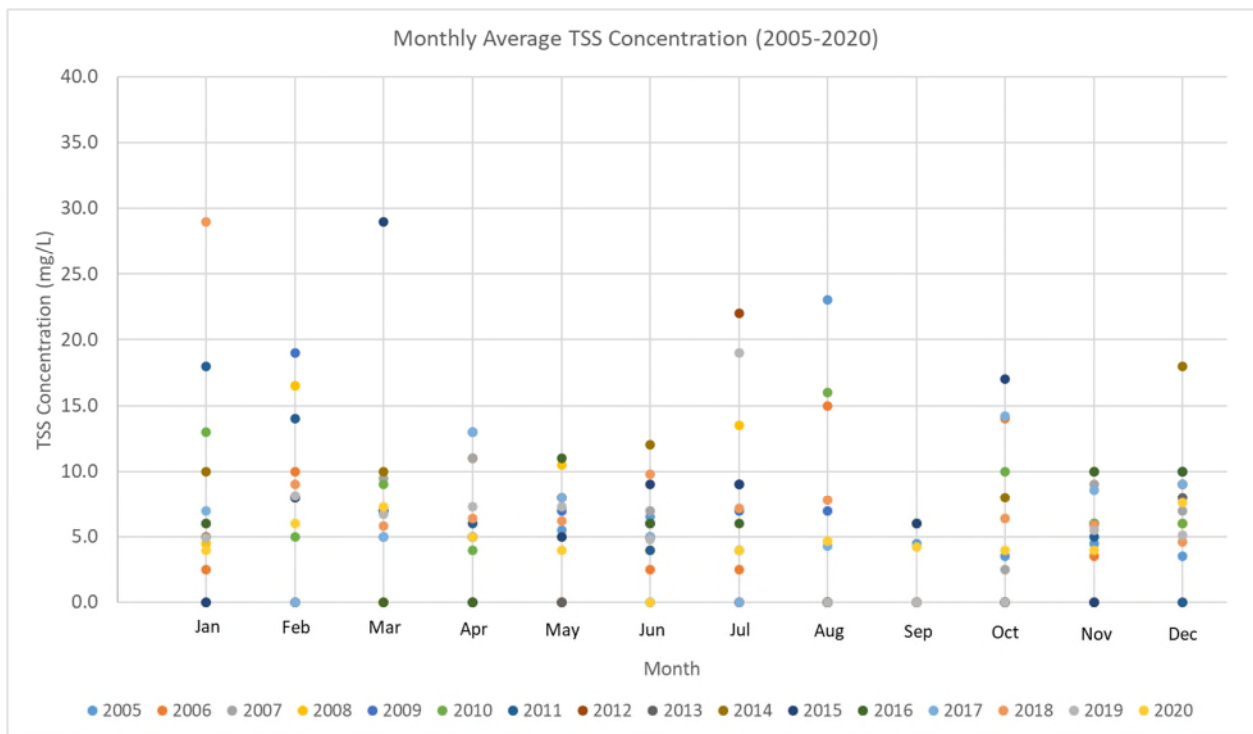
The Draft Permit increases the sampling frequency for TSS at Outfall 001 from 1/month in the 2008 Permit to 2/month. As described at pages 19-20 of the Fact Sheet, EPA believes that the increased sampling is necessary to provide additional data to calculate a TSS concentration more representative of the monthly average value and is consistent with the requirements at other terminals in Massachusetts. CITGO takes exception to the increased

monitoring requirements for the following reasons and requests that the sampling frequency remain 1/month:

Existing levels of TSS from the Facility do not show cause or reasonable potential to exceed the water quality criteria of the Weymouth Fore River.

According to the MassDEP's 2016 Integrated List of Waters, TSS is not listed as impaired for the Weymouth Fore River. The sampling results from the past five years (July 1, 2015 through June 30, 2020) did not exceed the permit limits. Therefore, there is no reason under EPA permitting procedures to require further evaluation and possible limitations for TSS. These results show no cause or reasonable potential for TSS from the Facility to exceed water quality criteria. As EPA has failed to identify TSS as a pollutant of concern that would cause or contribute to impairments on the receiving water, further operation expenditures and additional monitoring requirements for TSS are not warranted. The following figure shows the TSS sample concentrations from 2005 to 2020, illustrating that the Outfall 001 discharge has been in compliance for 16 years with the exception of one month (February 2013, 162 mg/L not shown in the figure). This single exceedance was the result of Winter Storm Nemo, when the Facility was challenged to provide heating products to its customers due to heavy snow and blizzard conditions. Due to weather conditions and the extreme grade of the Facility, safety measures were required (e.g. sanding). A stormwater runoff event was then generated following the storm that flushed the sand products into the stormwater discharge causing the 162 mg/L TSS result.

The TSS results from Outfall 001 over the past 16 years have averaged 5.6 mg/L per month (see figure below for the annual means from 2005 to 2020, the data from February 2013 is excluded). Also, there were 59 months in which the TSS discharge was 0 mg/L which is an average of nearly 4 months per year. There is no justification to increase TSS sampling just to show that it is non-detect during one third of the sample events every year.



The Facility has met TSS requirements in the past 5 years.

As indicated at page 19 of the Fact Sheet and as discussed above, the TSS concentrations in the past 5 years have ranged from below the laboratory minimum detection levels to 32.5 mg/L with no permit limitation exceedances. As the Facility has historically met the effluent limitation, there is no basis for EPA to increase the monitoring requirement for TSS.

Increased data will not provide additional assurance of a representative monthly average value.

Twelve samples per year provides adequate effluent data to determine if TSS from the Facility is causing or contributing to a water quality impairment – and, as stated above, there is sufficient evidence to demonstrate TSS from this discharge cannot be doing so. If the EPA’s intent in increasing the sampling frequency is to better understand the impact of TSS on the receiving water, there are alternative sources of information that would provide more insight than the additional samples proposed from the Facility. These include ambient water quality studies, existing effluent data from all the other facilities that discharge to the receiving water body, and non-point source sampling, all of which provide research and analysis to understand TSS impacts, if any. CITGO fails to understand EPA’s rationale for increasing TSS monitoring given that existing effluent data from the Facility is more than sufficient, and routinely below permit limits regarding both daily maximum and monthly average. There is no basis for EPA, in conjunction with the sources of information discussed above, to further expand investigation of the impacts of TSS on a receiving water – particularly one in which TSS is not impacting the designated uses.

In addition, the twice monthly monitoring requirement is also not consistent with those requirements in other terminals in Massachusetts, as incorrectly indicated at page 20 of the Fact Sheet. The NPDES permits #MA0004006 (Sunoco, East Boston), #MA0028037 (Sprague Twin Rivers), and #MA0020869 (Sprague Quincy) have a once monthly monitoring requirement, the same as in the 2008 permit for this Facility.

Request:

CITGO requests that the TSS monitoring and reporting requirement for Outfall 001 remain 1/month as in the 2008 permit.

2. Slack Tide and Sampling Requirements

Footnote 1 to Part I.A of the Draft Permit provides significant detail as to the requirements for sampling during a “qualifying event” including that the “discharge occurs during daylight hours on an outgoing tide at least one hour from both the low and high slack tide.” However, these limitations make it exceedingly difficult for the discharge to be considered a qualifying event as on multiple days each month, the above period will either not occur during daylight hours or for such a short duration as to make sampling impractical. The Facility does not have the ability to detain or control the discharge timing for stormwater that falls outside of the diked areas. Furthermore, the requirement to collect a sample within 15-60 minutes of “the initiation of the discharge” significantly reduces the likelihood that a “qualifying event” will begin within the already restrictive low to high slack tide period. For an extreme case, if all the storm events within a month occur during nighttime and produce discharges during the slack tide periods, it will result in a dilemma of sampling for that month as all the discharges in this case would not meet the “qualifying event” requirement.

Also, the Facility is unaware of any specific requirements or guideline regarding the timing of estuary monitoring (e.g., EPA 2006 Volunteer Estuary Monitoring: A Methods Manual, Second Edition; EPA 2010 Permit Writer's Manual; EPA 2015 Water Quality Standards Handbook; EPA 2004 Technical Support Document for Effluent Guideline Program Plan; EPA 1991 Guidance Manual for the Preparation of NPDES Permit Applications for Stormwater Discharges Associated with Industrial Activity).

Request:

CITGO requests that Footnote 1 be revised to allow for sampling pursuant to the 2008 Permit.

In the alternative, should EPA retain this provision, CITGO requests that EPA provide clarification in the permit as to the reporting and sampling requirements should a "qualifying event" not occur in a given month (i.e. should CITGO not report a discharge or sample a so-called non-qualifying event).

3. Avoidance of Discharge During Slack Tide.

Part I.C.1.b(2) of the Draft Permit requires that CITGO "shall avoid discharging stormwater" during slack tide. However, the Facility does not have the means to control or store the uncontrolled stormwater that falls outside of the diked areas to control the timing of a discharge. As described in the Background section (page 2), due to the extreme topographic relief from the landside of the Facility at Quincy Avenue to the Weymouth Fore River, a grade drop of approximately 60 feet, during a rain event stormwater outside of the diked areas naturally flows through the drainage system to Outfall 001. As such, CITGO cannot avoid discharge of its uncontrolled stormwater during slack tide. The EPA has provided no evidence that the discharge from this Outfall 001 during slack tide would somehow impair the receiving waterbody.

Further, the Facility does not recognize any regulatory bases associated with the control of stormwater discharge associated with tides (e.g., EPA 2010 Permit Writer's Manual; EPA 2015 Water Quality Standards Handbook; EPA 2004 Technical Support Document for Effluent Guideline Program Plan; EPA 1991 Guidance Manual for the Preparation of NPDES Permit Applications for Stormwater Discharges Associated with Industrial Activity; EPA 1991 Technical Support Document for Water Quality-based Toxics Control).

Request:

CITGO requests that the prohibition in Part I.C.1.b(2) regarding discharging stormwater during slack tide be deleted from the Draft Permit.

4. pH Monitoring Frequency and Reduced Limitations

Existing sampling data from the Facility do not show cause or reasonable potential to exceed the water quality criteria of the Weymouth Fore River.

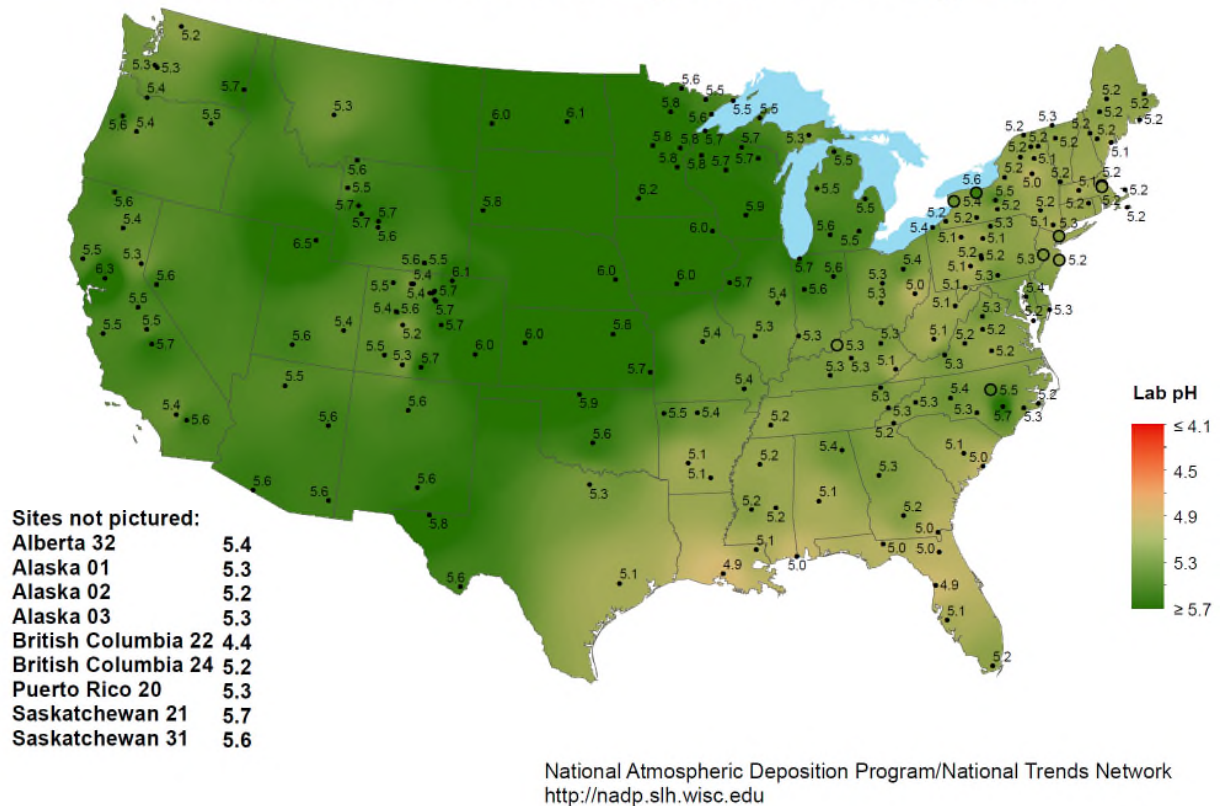
As described at page 20 of the Fact Sheet, EPA proposed to increase the monitoring and reporting requirement for pH from monthly to weekly for Outfall 001. The Facility objects to the increased monitoring as the existing discharge pH from the Facility does not show cause or reasonable potential to exceed the water quality criteria of the Weymouth Fore River. This is evidenced by the sampling results from 2015 to 2020, which ranged from 6.8 to 8.0 S.U., with no exceedances of the 2008 Permit. Furthermore, according to the MassDEP's 2016 Integrated List of Waters, the receiving water body is not impaired by pH. Therefore, there is no reason to require further evaluation and possible limitations for pH in accordance with EPA permitting procedures. As EPA has failed to identify pH as a pollutant of concern that has reasonable potential to violate a water criterion, the imposition of an increased monitoring requirement for pH is unjustified and lacks regulatory basis.

If the EPA's purpose in increasing the frequency of monitoring is to further understand the potential impacts of pH on the receiving water, this has been done by previous ambient water quality studies with historical monitoring data for the Weymouth Fore River (e.g., MassDEP 2003 Boston Harbor Watersheds Water Quality & Hydrologic Investigations, Massachusetts Division of Marine Fisheries (DMF) Technical Report TR-5 Rainbow Smelt (*Osmerus mordax*) Spawning Habitat in the Weymouth-Fore River). More importantly, the existing effluent data from the Facility is sufficient for EPA to investigate the potential impacts of pH on the receiving water given that, again, pH has not been shown to cause or contribute to impairments on the Weymouth Fore River. The Facility fails to recognize any imperative needs for an increase of monitoring and reporting requirement, which requires additional cost and effort from which there is no commensurate water quality benefit.

Natural background concentration

In addition, although the discharge from the Facility has historically met the discharge limits for pH, CITGO is concerned about the more stringent discharge limits for pH in the Draft Permit. National Atmospheric Deposition Program ("NADP") data shows that rainwater in the New England region often has a pH below the proposed discharge limitation of 6.5-8.5 S.U. Based on the NADP data, it appears that rainwater in New England contains pH levels below 6.0 S.U. The following figure shows the 2018 annual pH map of the U.S. The data from other years perform similarly. The monthly average of pH in rainfall in Massachusetts based on the NADP data collected from 1985 to 2018 is approximately 4.7 S.U.

Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 2018



As the Facility is a petroleum storage and distribution facility, there are no processes on site that alter pH. It appears that some level of natural buffering occurs, resulting in pH in stormwater above 6.0 S.U., due to contact with soils and impermeable surfaces at the Facility. However, as this natural buffering is limited and outside the control of CITGO, EPA should acknowledge that the pH of rainwater in this area is acidic, and that this is a natural condition that impacts the stormwater discharge.

The Draft Permit should be modified to include that a discharge below 6.5 S.U. or evidence that the receiving waterbody's pH level fluctuated more than 0.2 S.U. during a storm event does not constitute a violation of the permit.

Request:

CITGO requests that the monitoring frequency for pH be retained as once monthly, the same as that imposed in the 2008 Permit.

CITGO also requests that the Draft Permit include that a discharge below 6.5 S.U. that can be attributed to sampling of rainwater will not constitute a violation.

5. Fecal Coliform:

The facility does not engage in any processes and activities related to bacteria production and/or discharge.

Part I.A of the Draft Permit requires a monitoring and reporting requirement for fecal coliform for the first time. CITGO takes exception to the new requirement. As stated by EPA in the Fact Sheet (page 21-22), there is no source of bacteria at the Facility and any bacteria detected is the result of wildlife in the area of the Facility. In fact, EPA specifically states that (1) “the Facility does not engage in activities that would be expected to generate large sources of bacteria, stormwater runoff can readily transport bacteria from surfaces susceptible to the waste products of warm-blooded animals or pathogens”, and (2) “Birds are often observed congregating at oil terminals in the containment areas where water ponds.”

These facts, which include that there are no sanitary discharges to any of the stormwater outfalls at the Facility, suggest that the bacteria from this Facility is likely from the stormwater runoff transportation of surface wildlife/birds waste products. However, birds are considered a natural condition and not controllable in terms of the stormwater treatment processes.

The discharges through Outfall 001 are not categorized as any primary sources for bacteria listed in the MS4 permit.

EPA’s rationale for the new fecal coliform monitoring requirement is based on a narrative criteria for fecal coliform at 314 CMR 4.05(4)(b)4a which states:

“Waters designated for shell fishing shall not exceed a fecal coliform median or geometric mean MPN of 88 organisms per 100 ml, nor shall more than 10% of the samples exceed an MPN of 260 per 100 ml or other values of equivalent protection based on sampling and analytical methods used by the Massachusetts Division of Marine Fisheries and approved by the National Shellfish Sanitation Program in the latest revision of the Guide For The Control of Molluscan Shellfish (more stringent regulations may apply, see 314 CMR 4.06(1)(d)(5)).”

However, although the Weymouth Fore River is impaired for bacteria, thereby requiring a TMDL, EPA has failed to identify the source of bacteria resulting from industrial activities at the Facility and there is no evidence to suggest that the Facility is or has been a source. In addition, stormwater discharges from Municipal Separate Storm Sewer System (MS4) outfalls constitute the majority of point source stormwater flow to the Weymouth Fore River. EPA has determined, as represented by the NPDES Massachusetts Small MS4 General Permit, that BMPs suitable for managing and ultimately reducing bacteria/pathogens involve primarily non-structural means such as public education and outreach and enhanced illicit discharge detection and elimination. There are no analytical sampling, monitoring or reporting requirements for bacteria/pathogens in the MS4 general permit for MS4 operators discharging to TMDL-regulated or impaired receiving waters.

As noted, bacteria is neither an input nor product of industrial activities at the Facility. This Facility is not a source of pet waste or poorly managed septic systems, which are the primary sources for bacteria in stormwater cited in the MS4 permit. The Facility has confirmed that only the four sources of stormwater listed above are discharged through Outfall 001 (i.e. there are no illicit discharges). Consequently, requiring the Facility to monitor and report on bacteria provides little or no value, as it is an unlikely source, and it is a significant burden not otherwise imposed upon more likely contributing sources.

As the Facility (1) does not have any process related source that would contribute fecal coliform; (2) does not have operations/treatment available or feasible to remove bacteria from birds/wildlife; and (3) EPA has failed to establish that the Facility is or has been a source for fecal coliform that impacts or could impact the receiving water body, CITGO objects to the additional monitoring for fecal coliform as it lacks an adequate and defensible regulatory basis. More importantly, the bacteria in the discharges contributed by wildlife/birds (e.g., Birds congregate at oil terminals in the containment areas where water ponds) is clearly irrelevant to any industrial activities (i.e., discharges directly related to manufacturing, processing or raw materials storage areas at an industrial plant), which shall not be regulated under NPDES in accordance with 40 CFR Part 122.26 (b)(14).

Request:

CITGO requests that EPA eliminate the monthly monitoring and reporting requirement for fecal coliform.

6. Enterococcus Limit:

Part I.A of the Draft Permit requires compliance with an Enterococcus limit (average monthly limit of 35 colonies/100 ml and a maximum daily limit of 104 colonies/100 ml) for the first time. The Facility objects to the new compliance requirements for Enterococcus. The EPA has failed to provide a quantitative analysis for identifying the contribution of Enterococcus from the Facility's industrial activities. As indicated in the Fact Sheet (page 21), the Facility does not engage in activities that would be expected to generate large sources of bacteria and currently does not have any process related source for Enterococcus. The Fact Sheet also points out that "Birds are often observed congregating at oil terminals in the containment areas where water ponds." (Fact Sheet page 22). Bacteria is neither an input nor product of industrial activities at the Facility. This Facility is also not the primary sources for bacteria in stormwater cited in the MS4 permit (see details in the response of Fecal Coliform above). Stormwater runoff from other grass covered areas in the watershed, such as lawns, athletic fields, playgrounds and golf courses, are likely to provide a far greater bacteria discharge to the Fore river Basin solely based on areal extent that is measured in square miles rather than the few acres encompassing the Facility.

These facts suggest that the bacteria discharge from this Facility, if any, is likely from the stormwater runoff transportation of wildlife/birds waste products, and in light of the nature of this Facility, there are no reasonable avian controls that could be deployed. Further, the bacteria in the stormwater contributed by wildlife/bird waste products, again,

does not fall into any industrial categories or relate to any industrial activities as mentioned above, which then shall not be under NPDES regulations (40 CFR Part 122.26 (b)(14)).

Request:

CITGO requests that EPA eliminate the effluent limits for Enterococcus from the Draft Permit.

7. Benzene Limits:

Part I.A of the Draft Permit imposes a more stringent effluent limit of 5 µg/L for benzene (51 µg/L in the 2008 permit) for stormwater runoff from Outfall 001. EPA's rationale for the reduced benzene effluent limit is based on the application of the Remediation General Permit (RGP) and best professional judgement (BPJ). The Facility strongly objects to the new limit as the EPA approach is inappropriate and lacks regulatory and technology bases. The details are listed below:

The majority of the discharge from Outfall 001 is stormwater runoff.

EPA's application of the RGP is inconsistent with the discharges from the Facility's Outfall 001, which is not treated groundwater (in contrast to the onsite remediation system discharge via Outfall 002). CITGO notes that in describing the stormwater discharge in Section 3.2.1 of the Fact Sheet, EPA incorrectly refers to the discharges as "wastewater". The water quality of stormwater runoff from the site is already heavily regulated under special condition Part I.C.1. Best Management Practices (BMPs).

Here, EPA's use of BPJ to set an effluent limit of 5 µg/L for benzene is unreasonable. EPA's leap, using BPJ, to suggest that stormwater runoff is the same as remedial waste or effluent of a groundwater remediation system is unsupported, arbitrary and does not recognize the nature of the actual discharge from Outfall 001.

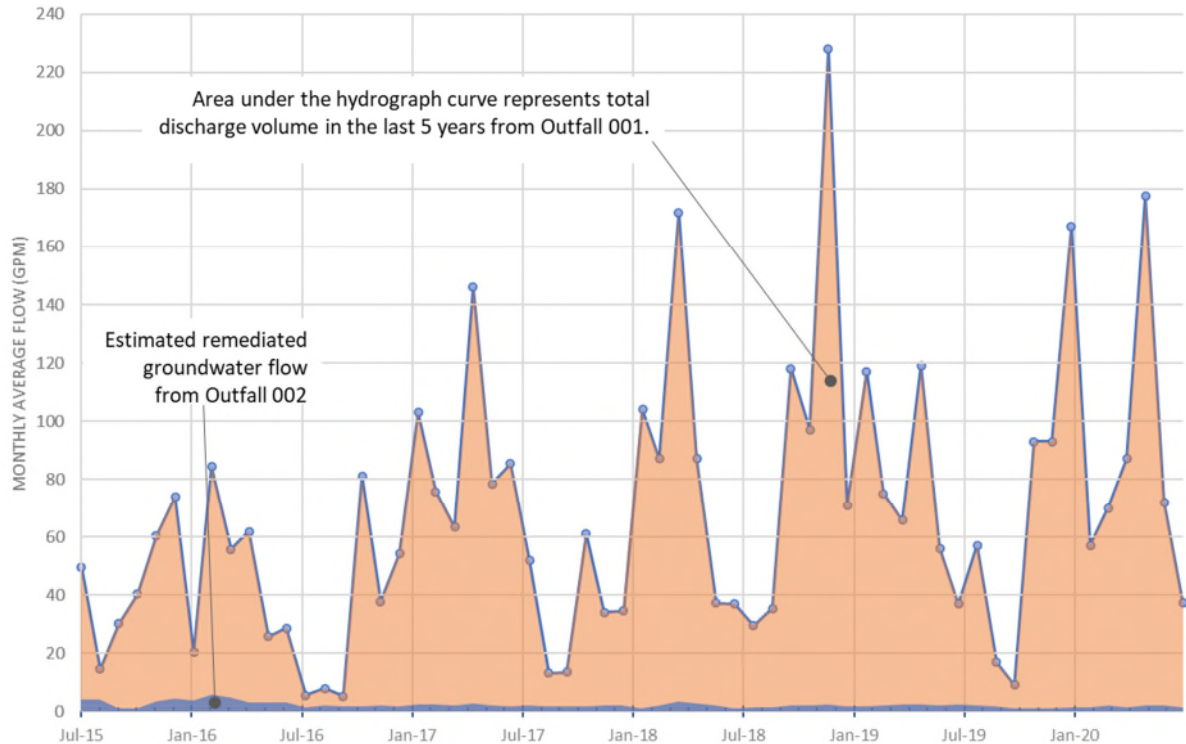
First, discharges from a groundwater remediation system are categorically different from stormwater runoff. EPA's 2004 Technical Support Document for the Effluent Guidelines Program Plan (ELG) has indicated that the stormwater discharges shall be subjected to general (i.e., Multi-Sector General Permit (MSGP)) or individual stormwater permits in accordance with 40 CFR Part 122.26 (b)(14)(i)-(xi), which require stormwater discharges associated with 11 categories of industrial activity to be covered under NPDES permits (unless otherwise excluded). In contrast, discharges from groundwater remediation systems are regulated under the RGP, which covers the discharges from eight general remediation activity categories (petroleum-related site remediation, non-petroleum-related site remediation, contaminated site dewatering, pipeline and tank dewatering, aquifer pump testing, well development/rehabilitation, collection structure remediation/dewatering, and dredge-related dewatering).

Second, Best Available Technology (BAT) for groundwater remediation should not be applied to the discharge at Outfall 001, which is predominantly stormwater runoff. As

noted in the Draft Permit, the discharges through Outfall 001 into the Weymouth Fore River consist of four flow sources including:

- 1) Stormwater from the truck rack loading area that is pretreated through a treatment system consisting of an API OWS with a maximum design flow rate of 1,600 GPM (OWS 2). OWS 2 is in place due to the increased likelihood of oil spills when conducting oil transfers at the truck rack. We note that the Facility employs specific spill response actions that minimize the impact of any such spills prior to entering the stormwater collection system.
- 2) Uncontrolled stormwater runoff from parking areas, building roofs, and paved roads, and controlled stormwater from tank farm secondary containment areas.
- 3) Hydrostatic test water from intermittent testing events: The hydrostatic test events are very infrequent (typically tested every 5-10 years or performed only on new tanks and on existing tanks that have had major repairs or alterations). It represents a small fraction of the total discharges from Outfall 001 and is separately regulated under the Draft Permit with stringent testing protocols prior to and during discharge (Note that in April 2013, CITGO provided EPA with written notification and test data from a hydrostatic discharge indicating all effluent parameters were not detected above laboratory detection limits).
- 4) Remediated groundwater: a treatment system consisting of an American Petroleum Institute (API) Oil Water Separator (OWS), carbon adsorption units, and a shallow tray air stripper (collectively referred to herein as OWS 3). The design flow rate of OWS 3 is 25 GPM (regulated separately under the Draft Permit as Outfall 002).

The figure below plots the average monthly flow from Outfall 001 in the past 5 years with the area under the hydrograph curve representing the total volumes (175 million gallons). Based on the reported average monthly flow from the groundwater remediation system, the discharge from Outfall 002 is approximately 5.84 million gallons. Discharge from Outfall 001 is predominately stormwater runoff that counts for more than 96% of the total flow. Therefore, best professional judgement should categorize the discharge as stormwater runoff and regulate its water quality accordingly.



The discharges (predominately stormwater) from the four (4) sources comingle and are routed through OWS 1 which consists of the following structural BMPs:

- One (1) Vortex Stormceptor Unit with a design flow rate of 6,000 gallons per minute (GPM) and a maximum rating of 7.294 million gallons per day (MGD). It is a hydrodynamic particle separator of which the main treatment function is for removal of TSS. It does not remove any dissolved constituents such as Benzene.
- Two (2) API OWSs in parallel, each with a design flow rate of 3,000 GPM (6,000 GPM total). The OWS is a physical unit operation that separates the liquids with different density by retaining the lighter liquid (Oil) while allowing discharge of denser stormwater runoff. It does not remove compounds that are dissolved in the water.

In applying BPJ, EPA does not have unlimited discretion in establishing permit effluent limitations. Rather, as noted by the Environmental Appeals Board (EAB) in *In Re Arizona Public Service Co.*, “[w]here applicable effluent limitations guidelines have not been established, section 402(a)(1)(B) authorizes the permitting authority to impose conditions representing technology-based standards such as BPT and BAT on a case-by-case basis ... Specifically the statute states that the Administrator may impose such conditions as the Administrator determines are necessary to carry out the provisions of the Act.” EPA has implemented these statutory provisions in 40 C.F.R. § 125.3(c).”

Further, 40 C.F.R. § 125.3(c) specifies that “[t]echnology-based treatment requirements may be imposed [in permits] through one of the following three methods:” (1) Application of EPA-promulgated effluent limitations guidelines; (2) a case-by-case determination of the minimum technology-based standards where EPA-promulgated effluent limitations guidelines are inapplicable; or (3) a combination of the first two methods when EPA-promulgated effluent limitations guidelines apply only to certain aspects of a discharger's operation or to some, but not all, discharged pollutants. 40 C.F.R. § 125.3(c). EPA guidance on determining case-by-case technology-based effluent limitations reinforces that such permit limits are to be developed only in circumstances “where EPA promulgated effluent guidelines are inapplicable.” See Office of Water, U.S. EPA, EPA-833-K-10-001, NPDES Permit Writers' Manual § 5.2.3.2, at 5-45 (Sept. 2010) (“Permit Writers' Manual”) (A.R. 3); accord Office of Water, U.S. EPA, EPA-833-B-96-003, NPDES Permit Writers' Manual § 5.1.4, at 68-70 (Dec. 1996).

When EPA does elect to use BPJ, courts apply the same standards as when EPA establishes national effluent limitations: “In the absence of national standards, the Act authorizes the Administrator to issue permits on “such conditions as the Administrator determines are necessary to carry out the provisions of [the Act].” 33 U.S.C.A. § 1342(a)(1)(B). EPA’s own regulations implementing this section enumerate the statutory factors that must be considered in writing permits. See 40 C.F.R. § 125.3(c), (d) (1987). See also 51 Fed.Reg. at 24915 (“In developing the BPJ permit conditions, [the EPA] Regions are required to consider a number of factors, enumerated in [33 U.S.C. § 1314(b)]....”). In addition, courts reviewing permits issued on a BPJ basis hold EPA to the same factors that must be considered in establishing the national effluent limitations. See, e.g., *Trustees for Alaska v. EPA*, 749 F.2d 549, 553 (9th Cir.1984) (EPA must consider statutorily enumerated factors in its BPJ determination of effluent limitations); *API*, 787 F.2d at 972, 976 (applying statutory factors in reviewing effluent limitations in a BPJ permit).” *Nat. Resources Def. Council, Inc. v. U.S. E.P.A.*, 863 F.2d 1420, 1425 (9th Cir. 1988).

Although the discharges from Outfall 001 consists of treated groundwater from a remediation system, stormwater runoff and hydrostatic test water, EPA has no rational basis to apply BPJ to set the 5 µg/L Technology Based Effluent Limit (TBEL) for benzene at this Facility. In the Fact Sheet EPA attempts to support the effluent limit by stating:

EPA finds that discharges from bulk stations and terminals are consistent with the type of discharges considered under the RGP, which include hydrostatic testing discharges from dewatering of pipelines, tanks, and similar structures and appurtenances that store or convey petroleum products, and dewatering and/or remediation discharges from collection structures (e.g., dikes) utilized for collecting miscellaneous sources of water from contaminated or formerly contaminated sites or sources, including when contamination is a result of the infiltration of contaminated groundwater or stormwater.

CITGO is dumbfounded by this interpretation. If EPA can merely use BPJ to find that any industrial operation is consistent with remedial activities because the industrial operations include petroleum conveyances, then why would EPA allow any outfalls to be permitted

under NPDES program requirements. Rather, every discharge from an activity that handles any hazardous material could be required to “remediate” its discharge based on BPJ rather than a benefit to the protection of water quality.

Regardless of the rationale employed by EPA, the discharge from Outfall 001 is not consistent with an RGP discharge for the following reasons:

- The EPA clearly erred in using the RGP as a comparable regulatory reference for Outfall 001 based on a problematic assumption of similar operations, pollutants and/or treatment technologies in use among this and other facilities. The discharge from Outfall 001 at this facility is predominantly general stormwater runoff, which is not subject to regulation under the RGP. The purpose of RGP regulations is to control the discharges of pollutants from eight general remediation activities (i.e., petroleum-related site remediation, non-petroleum-related site remediation, contaminated site dewatering, pipeline and tank dewatering, aquifer pump testing, well development/rehabilitation, collection structure remediation/dewatering, and dredge-related dewatering), which is functionally different than managing stormwater from industrial activities (i.e., stormwater discharge directly related to manufacturing, processing, or raw material storage areas) conducted at this facility. In addition, the storage/use of products (Petroleum/BTEX) from the facility, is also not equivalent to remediation and remedial treatment.
- Erroneously equating Facility stormwater runoff to RGP-regulated activities, as mentioned above, further leads to a misinterpretation and problematic statement from EPA, which concludes that the “typical treatment technologies and/or control measures (i.e., BMPs)” used for Outfall 001 is consistent with other facilities under which the 5 µg/L limitation can be achieved. For treatment of stormwater runoff, OWSs are the typical minimum treatment technology employed by Petroleum Bulk Stations and Terminals (PBST) as well as this facility. However, the API OWSs used by the Facility for Outfall 001 do not have carbon treatment technologies (i.e., carbon adsorption units and a shallow tray air stripper) such as those used at OWS 3 for discharges to Outfall 002 or other stormwater BMPs for advanced BTEX removal. As a result, the proposed 5 µg/L for benzene at Outfall 001 is not achievable by simply improving existing technology and/or control measures due to lack of carbon treatment technologies.
- The carbon treatment equipment employed at OWS 3 for discharges to Outfall 002 provides higher level treatment/water quality discharge as is typical for groundwater remediation purposes. These methods are not practical or viable options for BTEX removal from the stormwater runoff passing through Outfall 001. The remediation system at Outfall 002 is permitted for 25 GPM, which is less than 0.5% of the OWS 1 permitted flow capacity (6,000 GPM) at Outfall 001 (see the graph above depicting the flow through Outfall 001 of 175 million gallons in contrast to the 5.84 million gallons through Outfall 002).

The EPA clearly erred in identifying reasonable potential for benzene:

In addition to misclassifying the discharge as a remedial discharge, EPA has failed to provide the regulatory bases for the requirement of “applying the more stringent of applicable water quality-based effluent limits and technology-based limits” for benzene (Fact Sheet page 24). According to the MassDEP’s 2016 Integrated List of Waters,¹ the receiving water (i.e., Weymouth Fore River) is not impaired by BTEX. The benzene concentration discharged from this Facility is also lower than the nationwide criterion specified in EPA’s report “Ambient Water Quality Report for Benzene”. The water quality criterion for benzene, at a cancer risk level of 10^{-6} , is given as 40 µg/L (exposure of fish and shellfish consumption), while the maximum daily grab sample from this Facility is 13.3 µg/L. In addition, the effluent limit of 51 µg/L for Outfall 001 in the 2008 permit, established based on the state WQS and EPA’s 2002 National Recommended Water Quality Criteria, is consistent with other bulk petroleum storage facilities located in the Boston Harbor Drainage Area. Given that the benzene concentration in discharges from Outfall 001 has already met the WQBEL of 51 µg/L, EPA fails to identify any reasonable rationale in its BPJ analysis for the imposition of a more stringent limit for benzene, which will add substantial additional cost to the Facility.

EPA clearly erred in applying the guidelines in the EPA NPDES Permit Writer’s Manual to consider BAT and BPT when establishing the case-by-case TBEL for benzene using BPJ, which violates 40 CFR § 125.3(c)(2) and 40 CFR § 125.3(d):

According to the NPDES Permit Writer’s Manual, the development of a case-by-case TBEL requires a consideration of available technology, process implemented, and/or any other relevant factors (e.g., BPT and BAT requirements). The EPA has failed to consider BPT and BAT properly when determining the TBEL for benzene. Based on the requirement in EPA’s manual, a TBEL for benzene should consider both prevalent concentration for stormwater runoff and the removal efficiency of BTEX from the stormwater BMPs (which are not currently possessed by the Facility, allowing the following analysis). The mean concentration of BTEX in stormwater runoff from similar land use areas is in the range of 5,000-22,000 µg/L reported by a previous study (James et al, 2010)². The estimated removal efficiency of BTEX in stormwater BMPs is in the range of 80% - 99% (Hsieh and Davis, 2005)³. Therefore, the expected benzene concentration in treated stormwater runoff, in a best case, can be estimated as 50 µg/L by multiplying the lowest mean concentration and the highest removal efficiency ($5000 \times (1 - 0.99) = 50$). This is consistent with the 51 µg/L limit applied in the 2008 Permit rather than the unsupported EPA proposed limit of 5 µg/L.

¹ As noted at page 24 of the Fact Sheet, MassDEP is in the process of promulgating updated surface water quality standards, which adopt the updated federal toxic pollutant criteria. This results in an updated human health for carcinogenic criteria for benzene ranging from 16 µg/L to 58 µg/L.

² James, R., P. Wilbon and J. DiVincenzo. 2010. Pervious and impervious urban stormwater runoff in a rapidly urbanizing region: occurrence of fluoranthene and pyrene. Bulletin of Environmental Contamination and Toxicology. 85: 32–36.

³ Hsieh, C. and A. Davis. 2005. Multiple-event study of bioretention for treatment of urban storm water runoff. Water Science & Technology. 51(3-4): 177-181.

This result suggests that the effluent limit for benzene could be retained as the newly derived TBEL from the analysis above, which is consistent with the WQBEL previously established based on the human health criterion developed in EPA 2002 National Recommended Water Quality Criteria.

More importantly, the EPA clearly erred in implementing the 5 µg/L limitation for benzene at Outfall 001 based on the consistency of “monitoring results” for this and other facilities in Region 1 rather than a technology-based analysis following e.g., the analysis performed above or other valid methods.

EPA has failed to maintain equality among facilities:

EPA also attempts to support its BPJ analysis by arguing that the 5 µg/L limit for benzene is consistent with similar facilities. However, EPA refers to incorrect information regarding the effluent limit from other NPDES permits when developing the case-by-case TBEL. For example, the effluent limit for benzene at bulk petroleum storage facilities located in the Boston Harbor drainage area (Table 2 in the Fact Sheet) are either not required or 51 µg/L. The EPA notes in the Fact Sheet that some outfalls at these facilities in Boston Harbor have a 5 µg/L for benzene. However, this is incorrect as the outfalls referenced appear to be internal outfalls similar to Outfall 002, serviced by a groundwater remediation system rather than a predominantly stormwater discharge.

As a result, EPA’s use of BPJ to derive a limit of 5 µg/L for benzene established based on the RGP standard and sampling results is inappropriate and clearly not applicable for a storm water discharge like Outfall 001. An appropriate TBEL should be developed based on a technology-based analysis with the consideration of interstate equities and/or up-to-date criteria (e.g., updated human health for carcinogenic effects for benzene).

Request:

As the Weymouth Fore River is not impaired for benzene, CITGO requests that EPA revise the effluent limit for benzene to 51 µg/L, which is fully protective of the receiving water body and is (1) supported by EPA’s 2015 Updated Human Health Criteria; (2) consistent with the 2008 Permit; and (3) consistent with MassDEP’s proposed standards (16 µg/L to 58 µg/L).

8. Benzo(a)pyrene Limit

EPA imposes an effluent limit of 0.018 µg/L for Benzo(a)pyrene for the first time in Part I.A.1 of the Draft Permit. CITGO takes exception to offsetting a new compliance requirement for benzo(a)pyrene for the reasons below:

Reasonable potential does not exist for PAHs in the receiving water:

PAHs were not named as a cause of impairment for the Weymouth Fore River in accordance with the MassDEP’s 2016 Integrated List of Waters. As described at page 28 of the Fact Sheet, during the last five years, benzo(a)pyrene was non-detect in all collected

samples. The Facility fails to recognize any reasonable rationale and regulatory bases for the imposition of an effluent limit for Benzo(a)pyrene.

At page 28 of the Fact Sheet, the EPA indicates that by following the guidance of reasonable potential analysis in EPA's Technical Support Document for Water Quality-Based Toxics Control (TSD), reasonable potential was identified for Group 1 PAHs. The results of the analysis is inconclusive as all the relevant factors necessary in the reasonable potential analysis are not present in this case. Except for the dilution and industrial type that was used by EPA in the Fact Sheet, EPA fails to include existing data, type of receiving water and designated use, which are important factors required in the reasonable potential analysis. As mentioned above, existing samples and investigation results from the MassDEP's 2016 Integrated List of Waters suggest that the receiving water is not impaired by Group I PAHs.

EPA's qualitative descriptions stating: "the Facility's effluent is afforded no dilution in the receiving water" and "oil terminals are known sources of PAHs" are not sufficient to identify reasonable potential for PAHs.

Furthermore, EPA's statement: "oil terminals have led to water impairments in other Massachusetts waterbodies (e.g. Chelsea River terminals)" is inaccurate and inconsistent with the investigation results from the MassDEP's 2016 Integrated List of Waters, which suggests that Chelsea River (segment MA71-06) is not impaired by PAHs.

EPA clearly erred by violating applicable regulatory procedures for establishing WQBELs for PAHs:

EPA has established clear regulatory procedures for establishing WQBELs in NPDES permits. Federal regulations, as well as EPA's NPDES Permit Writers' Manual (2010) and Water Quality Standards Handbook (2015), set forth the procedures to determine the need for a WQBEL and, if needed, calculate a WQBEL consistent with applicable water quality standards and waste load allocations (WLAs) contained in applicable TMDLs. EPA abandons those procedures and imposes the WQBEL for benzo(a)pyrene using, however, the value of 0.018 µg/L directly from Massachusetts WQS. EPA's failure to follow established procedures in imposing a limit for benzo(a)pyrene for the Facility constitutes a clear error and is contrary to the requirements of 40 CFR 122.44(d)(1)(vii).

Infeasible compliance level for benzo(a)pyrene:

Page 3 of the Draft Permit requires that the effluent limit for benzo(a)pyrene be set at 0.018 µg/L. However, Footnote 10 of the Draft Permit acknowledges that the method minimum level (ML) for benzo(a)pyrene as well as all Group I PAHs is specified as 0.1 µg/L, which is two magnitudes greater than the effluent limit. Notwithstanding, as discussed above, that the effluent limit imposed by EPA is unnecessary and contrary to EPA's regulations and authority, EPA has failed to consider the present laboratory detection limits when determining the effluent limits. CITGO is concerned that although Footnote 10 indicates that the ML of 0.1 µg/L "shall represent the compliance level" for benzo(a)pyrene, the actual effluent limit set below the detection limit/ML will be impractical and will lead to

difficulties in execution for the compliance as the concentration benzo(a)pyrene in the collected samples will all likely be non-detect.

Request:

CITGO requests that EPA remove the effluent limitation of benzo(a)pyrene from the draft permit.

9. New Monitoring Requirement for Metals, Ammonia, Cyanide and Phenols

Part I of the Draft Permit incorporates new monitoring requirements for metals (copper, lead, nickel and zinc), ammonia, cyanide and phenols are imposed for Outfall 001 for the first time. These additional monitoring requirements are not named as a cause of impairment for the Weymouth Fore River in accordance with the MassDEP's 2016 Integrated List of Waters and are unreasonable and unnecessary.

The proposed discharge limits and sample parameters must be related to the discharge reasonably expected from a Facility.

EPA must have a rational basis for determining a Facility's discharge limits and sampling parameters. EPA improperly relies upon Section 308 of the Clean Water Act to provide authority to require reporting of information necessary to establish appropriate discharge limits. EPA, through reporting requirements, seeks to determine if discharge limitations are necessary in the future. However, the basis for establishing reporting requirements should be to limit and treat the constituents known to exist in the groundwater, soil and other surficial areas at a Facility or the discharge from that Facility that may impact the receiving waterbody. The sampling parameters and frequency should not encompass potential substances that have no connection to the discharge, have not been detected at a Facility, are not in use at or in processes at a Facility, or which are not under the control of a permitted operator. The following changes should be made to the final permits.

Chromium, cyanide and phenols are not actually present, used or stored at the Facility. Chromium, cyanide and phenols are generally emitted by coating or plating processes. CITGO is unaware of any historic process at the Facility that used these constituents, or of any sample data that suggests these constituents are present in the stormwater discharge from the Facility.

More importantly, all these pollutants are not named as a cause of impairment for the Weymouth Fore River in accordance with the MassDEP's 2016 Integrated List of Waters. As the EPA has failed to identify that the Facility is or has been a source, and, as these substances are not actually present at the Facility, CITGO objects to the additional monitoring for these substances and believes there is no basis to require testing for them.

Request:

CITGO requests that EPA remove the monitoring requirements for metals (iron, cadmium, copper, lead, nickel, and zinc) from the Draft Permit.

In the alternative, CITGO requests that should EPA elect to not adopt CITGO's above approach, sampling for these constituents be conducted in the first year, but for each constituent that is not detected above background levels, no further testing be required thereafter.

10. New Requirement For Ambient Characteristic (WET) Testing

Part I of the Draft Permit incorporates new monitoring and testing requirements for conditions in the receiving water body. Although CITGO understands EPA's goal of acquiring additional information regarding the water body, the parameters (including ammonia, nitrogen and cadmium) are unrelated to the Facility's discharge.

Request:

CITGO requests that if, following the first required WET Test, it is shown that the discharge from the Facility has the same or greater survivability of the target species than that of the Receiving Water, the proposed annual testing should be changed to require testing only every three years.

11. Sample Frequency

As the Draft Permit includes new or additional monitoring requirements (for example, PAHs) CITGO requests that if the frequency of any monthly sample parameter reported by the analyzing laboratory as not detected in the discharge over a twelve (12) month sampling period should be automatically amended to require only quarterly sampling.

12. Reopener Provision

As the Draft Permit incorporates provisions to re-open the final permit to allow modification at any time pursuant to 40 CFR § 122.62. Section 122.62 provides wide-ranging authority to reopen a permit for modification, including among other things substantial alteration to a Facility, new information regarding operations, promulgation of new standards or regulations, judicial decision and detection of non-limited pollutants above levels that can be achieved by appropriate technology-based treatment methods. A modification can be either minor, which does not require a new draft permit or public comment period upon the consent of the permittee, or require the more burdensome issuance of a new draft permit if the modification does not qualify as minor under 40 CFR § 122.63. Section 122.62 also allows reopening in limited circumstances, such as noncompliance, for revocation or reissuance. As Section 122.62 provides wide discretion for EPA to reopen the permits for a wide variety of reasons, the final permit should contain a provision that EPA will notify a permit holder prior to reopening a permit, allowing for discussion and comments on the rationale for reopening, the nature of proposed revisions and the potential to resolve a proposed revision as a minor modification, prior to a decision to issue a draft permit or open the matter to the public.

Request:

CITGO requests that the final permit should provide for notice and comment by the permit holder prior to EPA reopening the permit.

13. PFAS Monitoring Requirement

The Draft Permit and MassDEP Permit includes quarterly monitoring and reporting requirements for Per- and polyfluoroalkyl substances (PFAS) for Outfall 001 including the followings:

Perfluorohexanesulfonic acid (PFHxS)

Perfluoroheptanoic acid (PFHpA)

Perfluorononanoic acid (PFNA)

Perfluorooctanesulfonic acid (PFOS)

Perfluorooctanoic acid (PFOA)

Perfluorodecanoic acid (PFDA)

In the Fact Sheet, EPA states that the purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this Facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a Facility-specific basis.

The Facility objects to the proposed monitoring and reporting requirement for the following reasons:

Requiring PFAS monitoring is premature:

The Permit Fact Sheet cited Massachusetts narrative criterion for toxic substances at 314 CMR 4.05(5)(e) as “All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.” However, neither MassDEP nor EPA have established toxicity risk levels of PFAS in the surface water for human (non-ingestion), aquatic life or wildlife exposures. Although Massachusetts passed a revision to 310 CMR 22.00: Drinking Water Regulation that set a new PFAS Maximum Contaminant Level (MCL) of 20 ppt (ng/L) for the sum of the concentrations of six PFAS compounds in drinking water, this has no bearing on stormwater discharges that do not involve the human ingestion pathway. Hence, we believe that requiring monitoring of PFAS in stormwater is premature at this time.

Approved standard sampling and analyzing method not available:

In the Draft Permit, EPA imposes sampling requirements for PFAS compounds in stormwater. EPA has not yet approved any analytical methods for PFAS in stormwater.

Therefore, EPA provides a compliance schedule, so that the testing requirements do not apply until “6 months after EPA’s multi-lab validated method for wastewater and biosolids is made available to the public on EPA’s CWA methods program website.” This requirement is problematic as it is not tied to actual formal EPA approval of the analytical methods. The act of EPA making a method “available to the public” on its website is not sufficient to make that method legally enforceable. The Agency needs to issue a formal proposal to approve the method under 40 CFR 136, take public comments, and then make a considered decision as to whether that method should be approved as having met all of the requirements of 40 CFR 136. Until that process has been completed, the Agency cannot require the permittee to start monitoring, using an unapproved method.

The Agency tries to justify this requirement by citing a provision in its regulations that allows EPA to require monitoring using a method specified in the permit. That provision applies when the Agency actually specifies a specific method in the permit. It does not apply to this case as the draft permit does not specify a particular method given that there is no approval method ready to implement in permits. EPA cannot, after the permit is issued, announce a method on its website, and then claim that that method was somehow incorporated in the permit that was issued earlier. To address this issue, EPA should simply amend the Draft Permit to clarify that the PFAS sampling requirements will not become effective until after EPA has formally approved applicable methods under 40 CFR 136.

In addition, MassDEP requires in its permit that although PFAS sampling is suspended pending issuance of EPA approved method, if the method is not available by two (2) years from the effective date of the NPDES permit, CITGO shall conduct monitoring of the effluent for PFAS compounds using a method specified by MassDEP. If no EPA method is approved within twenty (20) months after the effective date of the NPDES permit, CITGO must contact MassDEP (massdep.npdes@mass.gov) for guidance on an appropriate analytical method. Again, this requirement places an unnecessary burden on the permittee to monitor when EPA releases a method on its website, rather than notice by the agencies to all permit holders of the necessary next steps.

Request:

CITGO requests that EPA delete quarterly monitoring and reporting for PFAS effluent from the Facility (Outfall 001) until six (6) months after EPA has formally approved applicable test methods under 40 CFR 136.

CITGO also requests that MassDEP delete the quarterly monitoring and reporting for PFAS effluent from the Facility (Outfall 001) until six (6) months after EPA has formally approved applicable test methods under 40 CFR 136.

In the alternative, CITGO requests that the Draft Permit and MassDEP Permit be amended to include that EPA and MassDEP will issue written notice to the permit holder upon approval of the sampling method for PFAS effluent and the compliance schedule to implement such testing.

14. Compliance Schedule:

The Draft Permit requires new limitations for Enterococcus, Benzene and Benzo(a)pyrene. Notwithstanding comments elsewhere in this document where CITGO provides the basis for removal/modification of the limitations for each of these parameters, in the event that EPA continues to include new limitations, we have the following comments on the compliance schedule:

EPA does not provide a compliance schedule for Enterococcus, Benzene and Benzo(a)pyrene. It is simply not possible for the Facility to meet these limitations immediately after the effective date of the permit. The Facility has not been designed for Enterococcus, Benzene and Benzo(a)pyrene removal, to the extent required by this Draft Permit as presented.

CITGO will need to evaluate the current treatment process and determine the type and extent of upgrade necessary to meet the new limitations. Further, each phase of the design, construction bidding, award, and implementation process requires extensive and adequate time. These procedures include but are not limited to budgeting and obtaining funding, procurement of engineering services to determine current system treatability levels and the extent of upgrade required, design of the necessary upgrade, development and bidding plans and specifications, advertising and bidding process, and contract award – all of which must occur prior to beginning work on the contract.

There is no possibility this can all occur immediately after the effective date of the permit.

Request: CITGO requests the following compliance schedule:

- 12 months from the effective date of the permit: engage engineering services to evaluate current necessary treatability levels, and determine type and extent of upgrade necessary;
- 36 months from the effective date of the permit: design upgrade, prepare bidding documents and specifications, obtain funding;
- 48 months from the effective date of the permit: advertise contract for plant upgrade;
- 54 months from the effective date of the permit: award contract; and
- 96 months from the effective date of the permit: construct upgrade and provide necessary testing to ensure compliance with new limitations.

15. Dilution Factor

In Section 4.2 of the Fact Sheet section 4.2 EPA erroneously stated that the State of Massachusetts determined that the dilution factor for the Facility is zero.

EPA misinterpreted the State's approach to establishing quantitative derivation of WQBELs. Although the State may determine WQBELs to be at least equivalent to that provided for rivers and streams, this only applies to parameters with WQBELs based on human health-based criteria. It does not apply to parameters with WQBELs based on aquatic life criteria, where a dilution factor should apply. See 314 CMR 4.03 (a) *"For rivers and streams, the lowest flow condition at and above which aquatic life criteria must be applied is the lowest mean flow for seven consecutive days to be expected once in ten years. When records are not sufficient to determine this condition, the flow may be estimated using methods approved by the Department."*

Request:

The Facility requests that EPA establish dilution factors when determining reasonable potential for parameters with WQBELs based on aquatic life criteria. In the alternative, if EPA chooses not to establish dilution factors and rejects CITGO's requests herein, CITGO should have the ability and time to provide dilution factors for EPA's consideration.

16. "Unpermitted" Outfall

Section Part I.C.6 of the Draft Permit requires that "Within six months of the effective date of this permit, the Permittee is required to complete EPA's CWA § 308(a) request for information on the outfall associated with the Vortex separator and wetland swale area" (the "Unpermitted Outfall)". This request specifically relates to additional sampling of the Unpermitted Outfall sought by EPA. CITGO objects to this request as the Unpermitted Outfall is exempt from NPDES permitting (including sampling) pursuant to 40 C.F.R. § 122.26. 40 C.F.R. § 122.26 Storm water discharges (effective: December 21, 2015 requires that:

(9)(i) On and after October 1, 1994, for discharges composed entirely of storm water, that are not required by paragraph (a)(1) of this section to obtain a permit, operators shall be required to obtain a NPDES permit only if:

- (A) The discharge is from a small MS4 required to be regulated pursuant to § 122.32;
- (B) The discharge is a storm water discharge associated with small construction activity pursuant to paragraph (b)(15) of this section;
- (C) The discharge is associated with a specific category of industrial activity;
- (D) The Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, determines that storm water controls are needed for the discharge based on waste load allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutant(s) of concern; or
- (E) The Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, determines that the discharge, or category of

discharges within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

The Unpermitted Outfall meets none of these requirements. The Unpermitted Outfall serves an approximately seven-acre portion of the sixty-four acre Facility. It is an isolated, non-contact area outside of the tank storage and operations areas (See Attachment 1-A attached to CITGO's May 24, 2017 response to EPA's CWA § 308(a) request) (due to its voluminous nature, CITGO incorporates by reference the May 24, 2017 letter into this comment letter). As described in the "Stormwater Report and Review of Redevelopment in Support of New Outfall NOI Submittal for BELD Plain Area of Site," dated May 1, 2008 (Attachment 2-A to CITGO's May 24, 2017 response to EPA's CWA § 308(a) request), the non-contact area that contributes stormwater runoff to the unnamed outfall encompasses the "BELD Plain" area, which is a relatively flat (elevation 9 to 12 feet) portion of the Facility that includes a wetland through which storm water passes (with significant recharge, evaporation and plant transpiration) before overflow and discharge to the Weymouth Fore River. Within the basin and to the south, the land surface elevation rises significantly (eventually reaching el. = 85). This area is external to all tank dikes and includes only roads for vehicle and equipment access (including emergency vehicles) to the eastern portion of the Facility. There are no material handling activities, including loading, unloading, transportation, conveyance or storage of any materials or waste products of any kind within this non-contact drainage area. In addition, because of the separation from the diked areas and other portions of the Facility that contain petroleum storage, handling and loading operations, rain and snowmelt from such areas remain segregated from the subject non-contact catchment area.

In addition to providing substantial information to EPA regarding the Unpermitted Outfall, CITGO explained the above in its May 24, 2017 response to EPA's CWA § 308(a) request, including that because CITGO did not believe the NPDES requirements applied to the Unpermitted Outfall, sampling was unnecessary. However, CITGO requested that should additional information be necessary, CITGO and its consultant, ES&M, would address any questions from EPA.

Now over three years later, with no contact in the interim, EPA is attempting to make sampling of the Unpermitted Outfall a requirement of the Facility's NPDES permit, which is unreasonable and unsupported by the above regulations. While CITGO is more than willing to work with EPA to provide necessary information regarding the Unpermitted Outfall, inclusion in the Draft Permit is unnecessary and potentially complicates compliance.

Request:

CITGO requests that EPA remove the requirements in Section Part I.C.6 from the Draft Permit and that any further information necessary be requested through the CWA § 308(a) request process.

As requested above, CITGO believes that EPA and MassDEP should revise the Draft Permit. CITGO looks forward to working with EPA and MassDEP to resolve the above issues and develop a final permit that is protective of the Weymouth Fore River and sustainable for CITGO.

Sincerely,

A handwritten signature in blue ink, appearing to read "Donald Griffin, Jr.", with a stylized, cursive script.

Donald Griffin, Jr.
EHSS Manager

Cc: Robert Boeri, CZM, by email (robert.boeri@state.ma.us)
Michael A. Leon, Esq.
Betsy Frederick, Kleinfelder

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